

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Facilitating the Deployment of Text-to-911 and	)	PS Docket No. 11-153
Other Next Generation 911 Applications	)	
	)	
Framework for Next Generation 911	)	PS Docket No. 10-255
Deployment	)	

**REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

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**I. INTRODUCTION AND SUMMARY**

CTIA – The Wireless Association® (“CTIA”) respectfully submits these reply comments in response to the Commission’s Notice of Proposed Rulemaking (“*NPRM*”) on issues related to the short- and long-term deployment of Text-to-911 and other Next Generation 9-1-1 (“NG911”) applications.<sup>1</sup> CTIA and its member companies are committed to fulfilling the promise of NG911 services for all citizens, particularly individuals with disabilities who CTIA recognizes are most significantly poised to benefit from closing the gap between today’s innovative mobile technologies and yesterday’s 9-1-1 emergency communications system. CTIA believes that the record overwhelmingly demonstrates that the Commission must:

- Rely on voluntary, industry-led collaborative efforts in the development and deployment of any interim or NG911 solutions;
- Recognize that the Commission has no legal authority to require interim or NG911 solutions, such as Short Message Service (“SMS”) to 9-1-1;
- Not consider SMS as an interim solution for text-based communications to 9-1-1;
- Focus Commission resources on the long-term development of an NG911 system; and

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<sup>1</sup> *Facilitating the Deployment of Text-to-911 and Other Next Generation Applications, Framework for Next Generation 911 Deployment*, Notice of Proposed Rulemaking, FCC 11-134 (Sept. 22, 2011) (“*NPRM*”).

- Acknowledge that prioritizing wireless 9-1-1 calls does not serve the public interest at this time.

Mobile voice and broadband networks will play key roles in the delivery of emergency services, and CTIA and its member companies are actively engaged in the NG911 development process. The record developed in response to the *NPRM* reflects the substantial difficulties of mandating an interim text-to-911 solution and demonstrates that the Commission is at a critical juncture in leading the U.S. towards an NG911 system. CTIA believes that the Commission should focus its resources on the full and complete development and deployment of a NG911 system.

If the Commission continues to seek short-term NG911 solutions, CTIA believes that the Commission's objectives would best be served by relying on voluntary, industry-led collaborative efforts. In fact, the Commission already has successfully utilized such a process to develop and deploy Wireless Emergency Alerts through the Commercial Mobile Alert Service ("CMAS"), which has led to voluntary participation by wireless providers representing nearly 97 percent of wireless subscribers, as well as through the Wireless Priority Service program. By using this and other collaborative processes as a blueprint, the Commission can promote the development of technically and economically feasible solutions for NG911, including text-based communications to 9-1-1.

Alternatively, the Commission's past efforts to address E9-1-1 issues in the mobile environment demonstrate the dangers of attempting to force the adoption of a technical solution that does not sufficiently take into account the needs and concerns of the wireless industry and Public Safety. When the Commission attempted such efforts before, it faced countless waiver requests, challenges before the Commission, and even legal challenges in the Courts. The Commission should avoid repeating this unfortunate history.

Further, the *NPRM* fails to establish that the Commission has the requisite legal authority to adopt regulations governing SMS messaging to 9-1-1. The *NPRM* does not make any availing claims of legal authority. On the instant record, the legal theories articulated in the *NPRM* do not provide sufficient authority for the FCC to adopt any rules governing SMS-based messaging to 9-1-1. Finally, because SMS is properly classified as an information service, the Commission's authority to regulate SMS as a general matter is extremely limited.

The record developed by the Commission also reflects widespread agreement on numerous other issues related to NG911. In particular, wireless carriers, equipment manufacturers, standards bodies, and Public Safety all have highlighted their concerns with SMS messaging as a means of requesting emergency services. The record also reflects agreement that any interim solution developed by the Commission must be technologically feasible based on today's technologies and networks, as this will best promote the development of long term efforts. The record further echoes CTIA's findings regarding PSAP trigger mechanisms, 9-1-1 call prioritization, and effective consumer education measures.

## **II. TO BE SUCCESSFUL, AN INTERIM NG911 SOLUTION MUST BE THE RESULT OF A VOLUNTARY, COLLABORATIVE, INDUSTRY-DRIVEN PROCESS**

Over the years, the wireless industry has dedicated substantial personnel and financial resources toward developing technologies to ensure users' access to emergency services. At this stage, the Commission has reached a crossroads in the development of NG911 solutions. In the *NPRM*, the Commission has continued to press for data on the benefits of a short term text-to-911 solution even though the wireless industry has repeatedly made clear that there is widespread opposition to a mandated text-to-911 interim solution. CTIA believes that any interim NG911 solution must be the result of a voluntary, collaborative approach among

industry, Public Safety, and consumer stakeholders, and that such an approach would best serve the Commission's policy objectives.

Various best practices with respect to interim NG911 solutions are being developed in particular industry-based forums, as demonstrated by the opening comments in this proceeding. For example, "NENA, 3GPP and ATIS are developing standards needed to support text and other multimedia emergency services, and industry representatives, including carriers and 9-1-1 technology and software providers, are participating in these efforts."<sup>2</sup> CTIA agrees with Motorola Mobility that "[t]he Commission should continue to support [non-voice emergency services] and its messaging/media to 9-1-1 standardization work, and should look to this community for indications of what short- and long-term solutions should be implemented, and what schedule can realistically be supported for deployment."<sup>3</sup> Further, the initial voluntary efforts underway in various regions of the country provide valuable initial data and "are helpful to evaluate known and previously undiscovered technical, operational, personnel, training, education, and scope availability issues for short-term, interim basis, and long-term text-to-9-1-1 options, and it is appropriate for the Commission to continue facilitating such voluntary agreed efforts."<sup>4</sup>

CTIA commends the industry-based forums and industry stakeholders who are working to develop interim NG911 solutions. CTIA agrees with the commenters in this proceeding that it is premature for the Commission to adopt regulations in this area and that its objectives will be

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<sup>2</sup> Comments of Sprint Nextel Corporation, PS Docket Nos. 11-153 and 10-255, at 21 (Dec. 12, 2011) ("Sprint Nextel Comments").

<sup>3</sup> Comments of Motorola Mobility, Inc., PS Docket Nos. 11-153 and 10-255, at 6 (Dec. 12, 2011) ("Motorola Mobility Comments").

<sup>4</sup> Initial Comments of the Texas 9-1-1 Alliance to the Notice of Proposed Rulemaking, PS Docket Nos. 11-153 and 10-255, at 4 (Dec. 12, 2011) ("Texas 9-1-1 Alliance Comments").

better achieved by promoting voluntary efforts in lieu of regulatory fiat. As the Texas 9-1-1 Alliance properly noted, “it is reasonable to conclude that mandatory requirements on text-to-9-1-1 for the much larger general public population present more complex operational and technical concerns, potential for abuses, and public education needs than the short-term or interim basis efforts for people with disabilities.”<sup>5</sup> For this reason, the Commission should heed the advice of Qualcomm and others that “[t]he Commission should continue to encourage these collaborative efforts, for they offer the best means of ensuring the successful rollout of interoperable and reliable NG911 services.”<sup>6</sup> Not only should such efforts be truly voluntary, but they should “be able to build upon existing platforms and standards to minimize costs to PSAPs and providers, so that they can focus resources on the remaining standards development, network and equipment upgrades, and PSAP funding mechanisms that are necessary to make NG911 a reality.”<sup>7</sup>

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<sup>5</sup> *Id.* at 7.

<sup>6</sup> Comments of QUALCOMM Incorporated, PS Docket Nos. 11-153 and 10-255, at 9 (Dec. 12, 2011) (“Qualcomm Comments”). *See also* Comments of MetroPCS Communications, Inc., PS Docket Nos. 11-153 and 10-255, at 2 (Dec. 12, 2011) (“MetroPCS Comments”) (“Generally, MetroPCS supports developing standards that will allow consumers to access emergency services using services other than traditional voice communications. However, MetroPCS does not believe that Commission-mandated Text-to-911 deployment, or any other Commission-mandated regulations, are the proper approach at this time. Rather, MetroPCS submits that the Commission should instead encourage industry-led efforts in examining the nature of the complex issues associated with non-voice emergency services and developing any standards to provide non-voice emergency services.”); Qualcomm Comments at 2 (“Qualcomm continues to believe that, on balance, the best means of ensuring the successful nationwide deployment of NG911 services would be to focus on the completion of wireless industry’s IP-based standards, which is benefiting greatly from close cooperation with the public safety community. These necessary and important interactions will help to build a solid foundation upon which to deploy a common set of solutions for all Americans and avoid diverting significant time, effort, and substantial sums of money on temporary solutions and patchwork deployments that may unfortunately confuse the population of likely users.”).

<sup>7</sup> Comments of Verizon and Verizon Wireless, PS Docket Nos. 11-153 and 10-255, at 7 (Dec. 12, 2011) (“Verizon Wireless Comments”).

Further, CTIA agrees with T-Mobile that the Commission should look to past collaborative efforts, such as the successful development of voluntary Wireless Emergency Alerts (“WEA”), also known as the Commercial Mobile Alert Service (“CMAS”) and the Wireless Priority Service program, as blueprints for the development of NG911 standards and processes.<sup>8</sup> As in WEA, the Commission should ensure that all industry stakeholders have the opportunity to participate in standards-setting efforts, and participation should be voluntary and coordinated. Similarly, the Commission “recently endorsed voluntary industry-led efforts to develop standards to address issues of ‘bill shock,’” and the Commission “should once again trust industry stakeholders to develop the standards necessary for a successful implementation of procedures to improve and enhance emergency response services.”<sup>9</sup>

Such a voluntary framework would promote technically and economically feasible, more readily deployable standards as well as competitive pressures to develop effective NG911 capabilities. This group should also be cognizant of consumer recommendations, particularly those of the accessibility community. In that regard, CTIA believes that the Emergency Access Advisory Committee (“EAAC”) could provide important guidance to the industry group that considers these issues. The EAAC devoted considerable effort and resources to the development of recommendations regarding access by persons with disabilities to emergency communications services. However, Congress, through the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”), severely limited the amount of time the EAAC was able to

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<sup>8</sup> Comments of T-Mobile USA, Inc., PS Docket Nos. 11-153 and 10-255, at 8 (Dec. 12, 2011) (“T-Mobile Comments”).

<sup>9</sup> MetroPCS Comments at 5-6.



spend developing and refining its recommendations.<sup>10</sup> CTIA believes that the EAAC's recommendations would have benefitted from additional review and discussion, and that the recommendations presented to the Commission do not reflect the diverse views of the EAAC members. By taking an advisory role going forward, the EAAC could better refine its findings and recommendations and provide valuable guidance in developing an interim NG911 framework.

It is clear, then, that there are numerous benefits to the Commission promoting a voluntary, industry-driven effort to implement an interim NG911 solution. Alternatively, if the Commission attempts to force through a short-term text-to-911 mechanism without regard to the needs and capabilities of the wireless industry and Public Safety, it likely will face numerous challenges both before the Commission and in the courts, ultimately delaying action on NG911. The Commission is well aware that taking this sort of action will only delay the benefits of NG911 to the public and provide uncertainty to Public Safety and the wireless industry. Past attempts by the Commission concerning E9-1-1 regulation provide a clear basis for this concern by CTIA and its member companies.

For example, when the Commission adopted Phase II E9-1-1 location accuracy requirements, it ended up having to grant additional time for nationwide carriers<sup>11</sup> and stay the rules for Tier II and Tier III carriers, acknowledging that existing deadlines created logistical issues making implementation difficult for wireless carriers.<sup>12</sup> Later, numerous carriers

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<sup>10</sup> Emergency Access Advisory Committee ("EAAC") Report and Recommendations, PS Docket Nos. 11-153 and 10-255, at 65 (Dec. 12, 2011) ("EAAC Report").

<sup>11</sup> *Enhanced 911 Emergency Calling Systems (Phase II Compliance Deadlines for Non-Nationwide CMRS Carriers)*, Order to Stay, 17 FCC Rcd 14841, ¶ 8 (2002).

<sup>12</sup> *Id.* at ¶ 17 ("As explained above, there are technical and equipment availability problems that prevent small and mid-sized carriers from implementing E911 Phase II pursuant to the current deadlines."). The Commission further anticipated that nationwide carriers would also

struggled to meet the Commission’s 95% handset penetration benchmark, and the Commission was flooded with requests for waiver of the deadline.<sup>13</sup> And when the Commission adopted PSAP-level location accuracy requirements – including several interim benchmarks – in September 2007, numerous wireless carriers filed suit against the FCC, and the Commission stayed the first interim compliance deadline.<sup>14</sup> At the time, then-Commissioner Adelstein properly stated his concern that “the majority’s insistence on plowing forward with compliance benchmarks without a full record, rather than conducting this proceeding in a more thoughtful and deliberate manner, does not truly advance E9-1-1.”<sup>15</sup> Ultimately, the Commission sought voluntary remand and vacature from the U.S. Court of Appeals for the District of Columbia Circuit,<sup>16</sup> which the Court granted.<sup>17</sup> Rather than repeat the experience of the past, CTIA

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encounter technical and implementation challenges. *Id.* (“In addition, this approach will help ensure that major technical and implementation issues are worked out initially by the nationwide carriers. The small and mid-sized carriers along with their necessary partners in their service areas, such as the PSAPs, can learn from the deployment experiences of the nationwide carriers....”).

<sup>13</sup> See, e.g., *In the Matter of Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petitions for Waiver of Enhanced 911 Phase II Requirements*, Opinion, 22 FCC Rcd 4835 (2007); *United States Cellular Corp (Request for a Limited Waiver)*, Order, 22 FCC Rcd 360 (2007); *Sprint Nextel Corp. (Request for Waiver of Location-Capable Handset Penetration Deadline)*, Opinion, 22 FCC Rcd 400 (2007).

<sup>14</sup> Jeffrey Silva, “Carriers push E-911 lawsuit in court despite winning deadline extension,” *RCRWireless* (Mar. 14, 2008), available at <http://www.rcrwireless.com/article/20080314/sub/carriers-push-e-911-lawsuit-in-court-despite-winning-deadline-extension/>.

<sup>15</sup> Commissioner Jonathan S. Adelstein Responds to Public Safety Bureau Stay Order, News Release (Mar. 12, 2008), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-280787A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-280787A1.pdf).

<sup>16</sup> Motion of Federal Communications Commission for Voluntary Remand and Vacatur, *Rural Cellular Association and T-Mobile et al. v. Federal Communications Commission and United States of America*, No. 08-1069 (D.C. Cir. July 31, 2008).

<sup>17</sup> Order Granting Mot. Rem., No. 08-1069 (Sept. 17, 2008).

therefore urges the Commission to let industry-developed standards and consensus drive the implementation of NG911 services.

### **III. THE COMMISSION HAS FAILED TO ESTABLISH THE LEGAL AUTHORITY TO ADOPT REGULATIONS GOVERNING SMS MESSAGING TO 9-1-1.**

#### **A. The *NPRM* Does Not Make Any Availing Claims of Legal Authority.**

As CTIA and others argued in their opening comments, the *NPRM* fails to establish that the Commission may lawfully adopt any regulations relating to text-based communications to 9-1-1, much less specific rules requiring interim SMS-based messaging to 9-1-1. Substantively, the three legal theories articulated in the *NPRM* do not, on the current record, provide sufficient basis for any rules governing SMS-based messaging to 9-1-1. The Commission contends that it has “generous authority” under the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”), “well-established legal authority” under Title III, and ancillary authority to mandate NG911 services.<sup>18</sup> None of these theories, as set forth in the *NPRM*, withstands scrutiny.

**CVAA.** First, the FCC has not shown that the CVAA confers authority to adopt regulations requiring an SMS-to-911 solution. Only Section 106 of the CVAA (codified at 47 U.S.C. § 615c) speaks to next-generation access to emergency services. That section grants the Commission limited authority to ensure access of persons with disabilities to IP-enabled emergency services. As noted in CTIA’s opening comments, the provision directs the Chairman to establish an advisory committee to recommend rules to enable access to IP-enabled services and authorizes the agency to implement the committee’s recommendations.<sup>19</sup>

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<sup>18</sup> *NPRM* ¶¶ 117-119.

<sup>19</sup> Comments of CTIA – The Wireless Association®, PS Docket No. 11-153, at 21 (Dec. 12, 2011) (“CTIA Comments”) (citing 47 U.S.C. § 615c(g)).

The CVAA does not grant the Commission authority to mandate or regulate SMS-to-911. As Verizon and Verizon Wireless (“Verizon”) have argued in this proceeding, it is clear from the structure of the CVAA that Congress intended the statute to confer only limited and targeted grants of authority. In general, the CVAA vests the FCC with narrow authority to impose accessibility regulations on five enumerated services.<sup>20</sup> Section 106, in particular, provides the Commission with targeted authority to adopt NG911 regulations for *IP-enabled* networks.<sup>21</sup> Congress specifically intended that the FCC focus on IP-enabled networks and services used by VoIP providers.<sup>22</sup> Consistent with this direction, the FCC must focus its NG911 regulatory efforts only on IP-enabled services, and not SMS.

Contrary to the FCC’s suggestion, Section 106 of the CVAA does not grant the Commission plenary authority over electronic messaging. In addition to its limited focus on IP-enabled networks, Section 106 expressly restricts the Commission’s authority to implementing the recommendations of the advisory committee. It then further limits the FCC to adopting only rules that are “achievable and technically feasible.”<sup>23</sup> To be sure, Section 106 permits the Commission to promulgate “other regulations . . . as are necessary,”<sup>24</sup> but it is clear from context that Congress did not intend this residual clause to grant the FCC sweeping authority. “Congress . . . does not, one might say, hide elephants in mouseholes.”<sup>25</sup>

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<sup>20</sup> Verizon Wireless Comments at 26 (citing 47 U.S.C. §§ 153(1)(A)-(D), 617(b), 619(a)).

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 25 (quoting CVAA § 106(a), (c)(6) and (g) (codified at 47 U.S.C. § 615c(a), (c)(6) and (g))).

<sup>23</sup> *Id.* at 25 (quoting CVAA § 106(g) (codified at 47 U.S.C. § 615c(g)). “Achievable” is defined as “with reasonable effort or expense.” 47 U.S.C. § 617(g)).

<sup>24</sup> 47 U.S.C. § 615c(g).

<sup>25</sup> *See Whitman v. American Trucking Ass’n, Inc.*, 531 U.S. 457, 468 (2001).

The Commission points to the CVAA’s “mandate to ensure ‘the accessibility, usability, and compatibility’” of advanced communications, as granting it “generous authority” under the CVAA.<sup>26</sup> But that language comes from Section 104, not Section 106. The Commission’s reliance on Section 104 is misplaced. Foremost, reading that language as a sweeping grant of authority to adopt NG911 regulations would render Section 106, a more specific grant of power, superfluous. Such a reading would directly contravene two cardinal principles of statutory interpretation – first, that the specific governs the general<sup>27</sup> and, second, that statutes should be read to avoid rendering any part superfluous.<sup>28</sup> Moreover, even assuming the quoted language from Section 104 were relevant here, the Commission’s authority under that part of the CVAA already has expired.<sup>29</sup>

**Title III.** The Commission also contends that it has direct authority under Title III of the Communications Act to “facilitate availability of text-to-911 and other NG911 capabilities.”<sup>30</sup> But as Verizon argued in its comments, the specific and delimited grant of authority under the CVAA must control over more general grants of authority, such as Title III, that do not specifically contemplate NG911 regulation.<sup>31</sup> At a minimum, the CVAA is strong evidence that Congress does not believe there is existing statutory authority to regulate an IP-enabled network.

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<sup>26</sup> NPRM ¶ 118 (quoting 47 U.S.C. § 617(e)(1)(A)).

<sup>27</sup> See *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992) (“[I]t is a commonplace of statutory construction that the specific governs the general[.]”).

<sup>28</sup> See *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) (“‘[A] statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.’” (citation omitted)).

<sup>29</sup> 47 U.S.C. § 617(e)(1) (requiring the FCC to promulgate regulations within one year after the date of enactment of the CVAA – *i.e.*, before October 7, 2011).

<sup>30</sup> NPRM ¶ 117.

<sup>31</sup> Verizon Wireless Comments at 26.

In any event, the FCC has failed in the *NPRM* to show that it has authority under Title III to require wireless service providers to support NG911 services or implement SMS-to-911 on an interim basis. The *NPRM* asserts that text-to-911 and other NG911 mandates “would fall within [the FCC’s] broad Title III authority over spectrum licensees as requirements that serve the public interest, convenience, and necessity[.]”<sup>32</sup> The Commission’s power to act in the public interest under Title III is not, however, unbounded. As the Supreme Court has observed, the authority to act in the “public interest, convenience, or necessity” is “not to be interpreted as setting up a standard so indefinite as to confer an unlimited power.”<sup>33</sup>

The Commission has failed to point to any specific grants of substantive authority in Title III. Title III consists of a number of specific substantive grants of licensing authority—*e.g.*, 47 U.S.C. §§ 303(a)-(h), 308(b)—together with provisions setting forth the FCC’s procedural authority over licenses—*e.g.*, 47 U.S.C. §§ 301, 316. As AT&T argued in its comments, the Commission has cited only to provisions, such as Sections 301 and 303(r), which define the FCC’s procedural authority to grant or modify licenses.<sup>34</sup> None of the provisions cited by the Commission speaks to the substantive power that the FCC has over those licenses.<sup>35</sup> It is not

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<sup>32</sup> *NPRM* ¶ 117 (citing 47 U.S.C. § 151).

<sup>33</sup> *NBC v. FCC*, 319 U.S. 190, 216 (1943); *accord FCC v. Sanders Bros. Radio Station*, 309 U.S. 470, 475 (1940) (“[T]he Act does not essay to regulate the business of the licensee.”); *Nat’l Ass’n of Regulatory Util. Comm’rs v. FCC*, 533 F.2d 601, 618 (D.C. Cir. 1976) (“*NARUC II*”) (“It has been repeatedly recognized that Commission power over the communications industries is not unlimited, either as to the construction of the ‘public convenience, interest or necessity’ standard as applied to activities clearly within its jurisdiction, or as to the extension of its jurisdiction to activities affecting communications.”).

<sup>34</sup> Comments of AT&T Inc., PS Docket Nos. 11-153 and 10-255, at 21 (Dec. 12, 2011) (“AT&T Comments”) (“The jurisdiction bestowed under Section 301 is limited to the specific activities for which authority is granted in Title III and elsewhere in the Act; and Section 303(r) only confers upon the Commission authority to take actions necessary and proper to discharge its duties enumerated in the Act[.]”).

<sup>35</sup> In addition to Sections 301 (authorizing the FCC to issue licenses) and 303(r) (authorizing the FCC to act as necessary to “carry out the provisions of the Act”), the

surprising that the Commission has not identified an applicable grant of substantive power in Title III, as there is none.

The *NPRM* fails to articulate a viable theory under Title III for one other reason. The Commission must exercise its Title III authority consistently with the rest of the Act. Without any concrete proposals, it is impossible to determine whether a rule would or would not be consistent with the rest of the Act.

***Ancillary Authority.*** Finally, the Commission has failed in the *NPRM* to justify reliance on ancillary authority to adopt NG911 regulations on the instant record. As CTIA noted in its opening comments, it is well-established that the FCC must tie any exercise of ancillary authority to some statutorily mandated responsibility, and must defend the exercise of that authority on a case-by-case basis with record evidence.<sup>36</sup> Moreover, any exercise of ancillary authority must not contravene other specific provisions of Act.<sup>37</sup> As noted above, the FCC has not advanced concrete, specific proposed rules. Until it does so, the Commission has failed to sufficiently justify the exercise of ancillary authority.<sup>38</sup>

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Commission invokes Sections 307(a) (authorizing the FCC to grant licenses), 309(j)(3) (requiring the FCC to design and conduct competitive bidding systems for issuance of licenses) and 316(a)(1) (authorizing the FCC to modify licenses). See CTIA Comments at 20 n.50 (citing *NPRM* at n.214).

<sup>36</sup> See *Comcast v. FCC*, 600 F.3d 642, 650-51 (D.C. Cir. 2010) (noting that “the permissibility of each new exercise of ancillary authority must be evaluated on its own terms” and that “the Commission must defend its exercise of ancillary authority on a case-by-case basis”).

<sup>37</sup> See *FCC v. Midwest Video Corp.*, 440 U.S. 689, 706 (1979) (“*Midwest Video II*”) (observing that the Commission’s Title I ancillary authority “would be unbounded” absent “reference to the provisions of the Act directly governing broadcasting” in Title III, and striking down attempted exercise of ancillary authority based on a direct conflict with other statutory provisions).

<sup>38</sup> See also AT&T Comments at 21-22 (citing *NPRM* ¶ 119).

As a final matter, the Commission cannot, consistent with the Administrative Procedures Act (“APA”), adopt rules based on the *NPRM* alone, as the *NPRM* fails to articulate any proposed rules and, thus, deprives interested parties of adequate notice and the opportunity to meaningfully comment.

**B. The Commission’s Authority To Regulate SMS Is Extremely Limited Because It Is Properly Classified As An Information Service.**

Beyond the deficiencies of the *NPRM*, it is simply the case that the Commission has very little authority to regulate SMS. SMS is not an interconnected service and therefore not a commercial mobile radio service. It is properly classified as an information service over which the Commission has limited authority.

SMS does not fall within the settled definition of Commercial Mobile Radio Service (“CMRS”). The Act defines CMRS as an “interconnected service” – *i.e.*, a service interconnected with the public switched network (“PSTN”) and which “gives subscribers the capability to communicate or receive communication from all other users on the [PSTN].”<sup>39</sup> SMS is not interconnected to the PSTN and does not “give[] subscribers the capability to communicate or receive communication from all other users on the public switched network.”<sup>40</sup> Rather, SMS text messaging occurs overwhelmingly between mobile phones and is not transmitted on the PSTN.

SMS is properly classified as an information service under Title I. It bears the hallmark of services that have long been classified as enhanced or information services. Specifically, SMS involves the storage and forwarding of messages, data conversion, and data retrieval functions. Those functions fall squarely within the Act’s definition of information services—

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<sup>39</sup> 47 U.S.C. § 332(d)(1); *see also* 47 C.F.R. § 20.3 (defining CMRS).

<sup>40</sup> *See* 47 C.F.R. § 20.3.



those services that provide the “capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications.”<sup>41</sup>

Store-and-forward services like SMS thus have consistently been treated as information services or enhanced services.<sup>42</sup> Indeed, even if it were interconnected, SMS is more properly classified as an information service.<sup>43</sup>

Consequently, the Commission’s ability to regulate SMS is limited. As an information service, SMS is exempt from direct regulation under Title II.<sup>44</sup> The FCC could not, for example, rely on its direct authority under 47 U.S.C. § 251(e)(3) to adopt 9-1-1 as the universal number for text-to-911, as suggested by Twilio.<sup>45</sup> To the extent the Commission would seek to regulate SMS under its ancillary authority, it must justify such regulation case-by-case with record

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<sup>41</sup> See 47 U.S.C. § 153(20).

<sup>42</sup> See, e.g., *Federal-State Joint Board on Universal Service*, Report to Congress, 13 FCC Rcd 11501, ¶ 75 & n. 148 (1998) (“1998 Stevens Report”) (“Electronic mail, like other store-and-forward services, including voice mail was classified [under the Modification of Final Judgment (“MFJ”)] as an information service. Moreover, the Commission has consistently classed such services as ‘enhanced services’ under *Computer II*.” (citations omitted)); see also *U.S. Western Electric Co., Inc.*, 552 F. Supp. 131 (D.D.C. 1982) (subsequent history omitted); *Amendment of Section 64.702 of the Commission’s Rules and Regulations*, 77 FCC 2d 384 (1980) (“*Computer II*”) (subsequent and prior history omitted).

<sup>43</sup> The Commission has made clear that an information service, even if interconnected, may not also be classified as a commercial mobile service. See *Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks*, Declaratory Ruling, 22 FCC Rcd 5901, ¶ 48 (2007) (“*Wireless Broadband Order*”) (rejecting the notion that mobile wireless broadband Internet access service should be classified as a “commercial mobile service” under Section 332, as well as an “information service” under Title I, even where interconnected, because “such a reading results in an internal contradiction in the statutory framework”).

<sup>44</sup> See *National Cable & Telecommunications Ass’n v. Brand X Internet Services*, 545 U.S. 967, 975 (2005) (“[T]he Act regulates telecommunications, but not information-service providers, as common carriers.”); see also *Time Warner Telecom v. FCC*, 507 F.3d 205, 208 (3d Cir. 2007) (concluding the Commission’s decision to classify wireline broadband Internet access service as an “information service” was based on a reasonable interpretation of the Communications Act, and upholding order that “substantially limit[ed] federal regulation of . . . wireline broadband Internet access service”).

<sup>45</sup> See Comments of Twilio Inc., PS Docket Nos. 11-153 and 10-255, at 5 (Dec. 12, 2011).

evidence.<sup>46</sup> As discussed above, the Commission has yet to do so.<sup>47</sup> CTIA reserves its right under the APA to comment on such proposals if, and when, the Commission makes them.

#### **IV. THE RECORD REFLECTS WIDESPREAD AGREEMENT ON NUMEROUS OTHER ISSUES RELATED TO NG911.**

##### **A. The Record Demonstrates Widespread Concern with SMS As a Limited Solution.**

As stated above, the Commission would best serve its policy objectives by relying on a collaborative effort among industry stakeholders in implementing NG911 services. This is particularly important in light of the significant concerns raised regarding SMS. Wireless carriers, equipment manufacturers, and Public Safety entities all have highlighted numerous shortcomings of SMS-to-911 as an interim solution. Because CTIA is concerned that SMS has “significant limitations that restrict the usefulness of the SMS platform as an emergency communications solution,”<sup>48</sup> it hereby urges the Commission not to mandate any interim text-to-911 solution based on SMS. In particular, commenters observed the following shortcomings of SMS:

- SMS does not support real-time communications with a PSAP, and there could be significant delays in message delivery to the PSAP. Indeed, segmented or concatenated SMS messages may not be delivered in order.<sup>49</sup>

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<sup>46</sup> See *supra* at 14 (citing *Comcast*, 600 F.3d at 650-51).

<sup>47</sup> *Id.*

<sup>48</sup> Motorola Mobility Comments at 3-4. See also, e.g., Sprint Nextel Comments at 4 (“SMS technology has inherent technical limitations that make it unsuitable for emergency use.”).

<sup>49</sup> See, e.g., ATIS Interim Non-Voice Emergency Services Incubator’s Report and Recommendation at 34 (“ATIS Incubator Report”), *attached to* Comments of the Alliance for Telecommunications Industry Solutions, PS Docket Nos. 11-153 and 10-255 (Dec. 12, 2011) (“ATIS Comments”); Motorola Mobility Comments at 3 (“SMS. . . does not support real-time communications”); Comments of the Blooston Rural Carriers, PS Docket Nos. 11-153 and 10-255, at 2-3 (Dec. 12, 2011) (“Blooston Comments”) (“These limitations include . . . the system is subject to significant delays in message delivery”); Sprint Nextel Comments at 6 (“A ‘conversation’ via SMS is generally slower than a voice conversation -- SMS does not occur during ‘real time’ and the user must type out a text message before sending it.”); *id.* (“Because

- A sender of a SMS message receives no confirmation that the message was received by the intended recipient.<sup>50</sup>
- Current SMS standards do not support automated routing to the PSAP or automated location information.<sup>51</sup>
- Because SMS messaging is not a session-based protocol, a series of messages from the same user may be routed to different PSAPs.<sup>52</sup>
- Delays in message transmission could result in PSAPs receiving SMS messages that are out of date.<sup>53</sup>
- Voice calls to 9-1-1 enable the PSAP operator to ascertain information about the caller's current physical/emotional state and the severity of the emergency, information that is less easily ascertained through SMS messaging.<sup>54</sup>

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there is no priority treatment of SMS text messages, delivery of text may be delayed or maybe even not delivered, as is typical of texting thru SMS today.”); T-Mobile Comments at 10 (“SMS . . . has no way to ensure that messages arrive in proper sequence”).

<sup>50</sup> See, e.g., Motorola Mobility Comments at 3 (“Further, under its current implementation, senders of SMS text messages are not provided with confirmation that the message was received by the destination recipient.”); Blooston Comments at 3 (stating that “acknowledgment of receipt of the message is not provided to the sender”); Comments of United States Cellular Corporation, PS Docket Nos. 11-153 and 10-255, at 5 (Dec. 12, 2011) (“USCC Comments”) (“SMS is less reliable than emergency phone calls because unlike a phone call, it is not always apparent to the sender that a message has or has not gone through and been received. . . . A sender will not be aware that their message has not been received and may believe emergency assistance is on the way even when that may not be the case.”); Sprint Nextel Comments at 12 (“When an SMS message is sent, the sender does not receive a delivery receipt and will not know if a message does not go through.”); T-Mobile Comments at 10 (stating that SMS “has no guaranteed delivery and gives no indication to the sender when a message has not been completed”).

<sup>51</sup> See Blooston Comments at 3. See also, e.g., Sprint Nextel Comments at 6 (“A short-term solution based on SMS technology is unlikely to include location information. Consumers may not understand that text messages do not include location information and may assume text messages include the same information that is typically included with a voice call.”); Motorola Mobility Comments at 3 (stating that SMS “will not easily support automatic user location information”).

<sup>52</sup> See, e.g., Sprint Nextel Comments at 12 (“In addition, because SMS is not a session-based protocol, there is no association made on the network identifying one SMS message as being associated with another SMS message from the same user. As a result, subsequent messages from the user may be delivered to different PSAP call - takers unless systems are designed and deployed to help correlate and deliver these messages.”); T-Mobile Comments at 10 (“SMS was not designed to work with 911: it is one-way rather than session-based (making it extremely difficult, if not impossible, to ensure that messages are routed between the caller and the same PSAP operator).”).

<sup>53</sup> See USCC Comments at 5.

- SMS messaging has security vulnerabilities that could lead to PSAPs being deluged with fraudulent or “SPAM” text messages.<sup>55</sup>
- The SMS message may not be delivered to the PSAP at all – a particular risk when there is a high volume of calls being placed on the network.<sup>56</sup>

Indeed, the Commission itself has acknowledged that “[t]he record indicates that SMS-to-911 has a number of technical limitations that affect its ability to support reliable emergency communications.”<sup>57</sup> These concerns have been echoed by Public Safety: the Public Safety Communications Office of the California Technology Agency stressed that widespread implementation of text-to-911 “could cause additional complexities, future inoperability issues, public confusion, and negatively impact public confidence.”<sup>58</sup> Similarly, the Texas 9-1-1 Alliance acknowledged that numerous reports to the Commission have identified concerns associated with SMS for emergency communications.<sup>59</sup> And APCO International has cited many

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<sup>54</sup> Sprint Nextel Comments at 6.

<sup>55</sup> See, e.g., Sprint Nextel Comments at 12 (“SMS messaging also has significant security vulnerabilities, and SMS messages are more susceptible to other potential risks, such as ‘SPAM’ and ‘spoofing.’”); T-Mobile Comments at 11 (observing that SMS “has significant security vulnerabilities that could result in PSAPs being deluged with fraudulent or abusive 911 texts.”).

<sup>56</sup> See, e.g., ATIS Incubator Report at 34 (finding that “SMS message delivery is a ‘best effort’ service; there are no guarantees that a SMS message will actually be delivered to its recipient”); Blooston Comments at 2 (“there is no guarantee of message delivery to the PSAP”); USCC Comments at 5 (“The majority of SMS environments operate in a store-and-forward methodology with minimal service or performance guarantees. When the destination is not available, for whatever reason, to accept the SMS it will be stored at the SMSC until the destination becomes available for delivery.”); Sprint Nextel Comments at 12 (“SMS messages have no priority on the network, meaning they will be ‘shed’ in the event there is congestion on the network from voice traffic.”); T-Mobile Comments at 11 (noting that SMS “does not support 911 location technologies because of the limited transmission time”).

<sup>57</sup> *NPRM* ¶ 53.

<sup>58</sup> Comments of the Public Safety Communications Office of the California Technology Agency, PS Docket Nos. 11-153 and 10-255, at 5 (Dec. 12, 2011) (“PSCO California Comments”).

<sup>59</sup> Texas 9-1-1 Alliance Comments at 5.

reasons why text calls will take “longer to process” than 9-1-1 voice calls<sup>60</sup> and observed that “many PSAPs do not have the ability to receive text messages via their current call handling equipment and software. There would be significant costs involved to implement this capability.”<sup>61</sup>

Indeed, by pushing forward with a SMS-based solution, the Commission risks unleashing unintended consequences and creating an environment in which NG911 capabilities may be maliciously exploited. For example, Twilio Inc. touts that its products allow users to “[b]uild applications that use the phone network to interact with people on land lines and cell phones all over the world. In just a few lines of code, you’ll have phones ringing.”<sup>62</sup> While Twilio has touted its technologies as capable of being used to “quickly and easily create NG911 applications and products,”<sup>63</sup> such technologies also could be used to create mischief or unleash a malicious cyberattack – with just a “few lines of code,” a sender could spoof<sup>64</sup> a local telephone number and victimize a PSAP from a computer anywhere in the world. Further, as CTIA has previously noted, NG911 communications can be conducted using devices or services provided by a carrier or manufacture, yet the carrier or manufacturer may have no visibility into the fact that an emergency call was even placed.<sup>65</sup> For example, a 9-1-1 “call” could be attempted via a third-party social media application on a mobile phone connected over a Wi-Fi network without

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<sup>60</sup> Comments of APCO International, PS Docket Nos. 11-153 and 10-255, at 8-9 (Dec. 12, 2011) (“APCO Comments”).

<sup>61</sup> APCO Comments at 5.

<sup>62</sup> Twilio Inc., <http://www.twilio.com/> (last visited February 8, 2012).

<sup>63</sup> Twilio Comments at 3.

<sup>64</sup> “Spoofing” is “another word for impersonation. Spoofing happens when someone on a network pretends to be someone else.” NEWTON’S TELECOM DICTIONARY 1049 (25<sup>th</sup> ed. 2009).

<sup>65</sup> CTIA Comments at 10-11.

any knowledge or involvement by the carrier or manufacturer. In this age of open application markets and third party services, the Commission is opening a vastly more complicated environment and must carefully evaluate the risks involved in creating these additional connections to 9-1-1.

CTIA therefore asks the Commission to heed the warnings of the wireless industry and stakeholder groups, in particular the ATIS INES Incubator. Notably, the INES Incubator stated that it could not recommend a SMS Relay solution because “SMS is not designed for emergency communications and thus presents a wide variety of documented problems if used as an emergency communication tool.”<sup>66</sup> Further, the Incubator stressed that “SMS will never be as robust and reliable as voice-to-PSAP and these limitations will likely pose a significant threat to individuals’ safety and well-being.”<sup>67</sup> While the EAAC Report and Recommendations includes a recommendation relating to “transitioning to IP-based text communication, SMS,” CTIA stresses the industry’s concerns with SMS-to-911 solutions and the technical feasibility of this recommendation.<sup>68</sup> CTIA notes that the EAAC – in contrast to the INES Incubator – was required to work under considerable time constraints, and the EAAC’s recommendations would have benefited from more extensive review and discussion.<sup>69</sup> While CTIA and its members believe that accessible IP-enabled emergency communications will provide considerable benefits to individuals with disabilities, the Commission must heed the numerous warnings regarding

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<sup>66</sup> ATIS Comments at 8. *See also id.* at 14-15 (reiterating the limitations of SMS for emergency use).

<sup>67</sup> ATIS Incubator Report at 34.

<sup>68</sup> EAAC Report at 65-66.

<sup>69</sup> *Id.* at 65.

SMS as an interim solution and not put into place a regulatory mechanism that is technically infeasible and/or would undermine Public Safety objectives.

**B. The Industry Should Not Implement an Interim Solution at the Expense of Longer Term Objectives.**

In the *NPRM*, the Commission has sought comment on numerous means by which it can facilitate a short-term NG911 solution.<sup>70</sup> While the industry, as demonstrated above, has put significant effort into considering interim or short-term solutions, CTIA emphasizes that any interim solution adopted by the industry must be based on today's technologies and networks. Such an approach would encourage more rapid deployment and enable the industry to develop innovative new methods and devote resources to a longer term solution without having to retrofit existing technologies. By overly focusing on short-term solutions, the Commission would undermine longer term efforts.

While the Commission repeatedly refers to "short-term" NG911 solutions in the *NPRM*, CTIA cautions the Commission that even a "short-term" framework will require considerable resources. As ATIS observed, "if new standardization is required for a solution, the solution probably would not qualify as a 'short-term' solution. The completion of the standards process – even an expedited process – can take months to complete. Only after this process is complete (or nearly complete) could new equipment be developed. This equipment would then have to be tested prior to general availability."<sup>71</sup> And T-Mobile stated that "no set of modifications to the existing CMRS SMS networks can be implemented rapidly, as all would need to be tested to make sure that they can actually work within an operational 9-1-1 setting, and then carriers and PSAPs would have to install the necessary capabilities. That process by itself is likely to take at

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<sup>70</sup> *NPRM* ¶¶ 34-59.

<sup>71</sup> ATIS Comments at 13.

least a couple of years, and would thus consume the bulk of the interim period prior to IMS being deployed.”<sup>72</sup>

For this reason, the Commission would best serve its objectives by promoting a voluntary short-term solution based on existing technologies and standards. This will enable the interim solution to be implemented without significantly impacting long-term NG911 efforts and bring near-term benefits to individuals with disabilities.<sup>73</sup> Further, it would be easier to make use of existing standards to accommodate an interim solution, rather than to undertake a burdensome process for developing interim standards.<sup>74</sup> Similarly, AT&T has argued that any proposed interim solution should rely on the recommendations of the already-convened INES Incubator.<sup>75</sup> Not only would an interim solution based on new technologies require substantial technological investment on the part of the wireless industry, but it also would require PSAPs to undertake expensive upgrades using scarce resources.<sup>76</sup> The burden on PSAPs is a particularly important factor to keep in mind given the risk that a short-term solution could be unsuccessful and squander valuable time and resources. As Motorola Mobility noted, “[w]ith the rate of

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<sup>72</sup> T-Mobile Comments at 12.

<sup>73</sup> Verizon Wireless Comments at 12 (“Moreover, any interim solution must be capable of immediate implementation (i.e. during 2012) and limited in duration to bring near-term benefit to individuals with disabilities and so service providers and PSAPs can use their resources for the greatest public interest benefit – NG911 deployment.”).

<sup>74</sup> ATIS Comments at 13 (“ATIS also notes that it would be challenging to develop interim solution standards (as opposed to making use of existing standards to accommodate an interim solution), and that an interim solution may not be compatible with the long-term NG9-1-1 solution under development.”).

<sup>75</sup> AT&T Comments at 2-3.

<sup>76</sup> Blooston Comments at 2 (“At this point in time and for the foreseeable future, PSAPs are simply not equipped (and will not be equipped) to process SMS text-to-911 transmissions, and the costs associated with the PSAP upgrades needed to achieve this capability are apt to be great. The scarce resources devoted to what would admittedly be a short term, interim solution are better reserved for the deployment of the final IP-based solutions.”).



technological change and standard developments that is currently underway, any financial, technical, or temporal resources directed toward interim solutions may be wasted or may produce only short-lived benefits as newer, more robust solutions are developed in the future.”<sup>77</sup> Indeed, the Swedish text-to-911 solution cited by AT&T “took years to develop, is subject to serious limitations, and has a surprisingly low participation rate,”<sup>78</sup> all the more reason why the Commission should proceed cautiously in promoting an interim solution.

Should the Commission require the industry to expend substantial resources on a short-term solution, it will necessarily distract from the development of a long-term solution. Any interim solution will inherently be “riskier” than a longer term effort that can rely on more fulsome standards development and stakeholder input.<sup>79</sup> Further, an interim solution, even one based on existing technologies, will necessarily require some re-engineering of current technologies to adapt them to emergency communications use, and this will distract key personnel from working on a longer term solution.<sup>80</sup> And “[i]t simply makes no sense to divert

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<sup>77</sup> Motorola Mobility Comments at 3.

<sup>78</sup> AT&T Comments at 6.

<sup>79</sup> *See, e.g.*, AT&T Comments at 2-3 (stating that “the Commission shouldn’t seek to divert industry resources away from developing a long-term, Multimedia Emergency Services (MMES, formerly known as NOVES) solution in favor of a riskier interim solution”).

<sup>80</sup> *See, e.g.*, Sprint Nextel Comments at 3 (“Sprint maintains that due to the technology limitations associated with SMS, it would ultimately do more harm than good to implement an interim solution based on SMS. Rather than focusing on re-engineering SMS technology to reduce its limitations, efforts should be directed at the long-term solution.”); USCC Comments at 6-7 (“In particular, while USCC agrees that ALI and nonauthenticated messages are important components of emergency calls, it may not be appropriate to require them as part of an interim SMS-to-911 solution because of the difficulty in promptly adopting them to the SMS context. USCC is hopeful these technical hurdles can be overcome, but believes the Commission’s efforts should be focused on long-term solutions rather than the flawed, interim SMS approach.”); Blooston Comments at 4 (“At present, technical standards do not exist for reliable text-to-911 communications, meaning that standards-setting bodies and the manufacturers would have to develop standards and protocols before the necessary equipment (both handset and PSAP) could be developed, manufactured and deployed. This would require, at minimum, several years.”).

time, money and effort into developing those standards because any technology ultimately developed would admittedly be an interim measure with (presumably) a very short service life in the field.”<sup>81</sup>

For these reasons, CTIA agrees with commenters who have asked the Commission to instead focus its efforts on a long term solution. This will require the Commission to “encourage a thoughtful and detailed examination of the challenges to text-to-911” and “not rush ahead of the work being done in standard-based groups or make decisions on limited or incomplete trials.”<sup>82</sup> As CTIA noted above, the best way for the Commission to promote the development of long-term NG911 solutions is to encourage the efforts of industry stakeholder groups. These “necessary and important interactions will help to build a solid foundation upon which to deploy a common set of solutions for all Americans.”<sup>83</sup> Indeed, such a focus on longer term solutions will enable the industry to improve on existing technologies<sup>84</sup> and create “more robust, reliable, and universal solutions.”<sup>85</sup>

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<sup>81</sup> Blooston Comments at 4.

<sup>82</sup> AT&T Comments at 6. *See also* Qualcomm Comments at 2 (“Qualcomm continues to believe that, on balance, the best means of ensuring the successful nationwide deployment of NG911 services would be to focus on the completion of wireless industry’s IP-based standards, which is benefiting greatly from close cooperation with the public safety community.”); MetroPCS Comments at 5 (“Rather than expend time, money, and quite possibly, consumer faith, on an interim program, the Commission should encourage industry stakeholders to quickly work towards developing uniform standards that reflect an industry consensus on the best practices for NG911 to ensure that the Commission’s goals are accomplished.”).

<sup>83</sup> Qualcomm Comments at 2.

<sup>84</sup> *See, e.g.*, Sprint Nextel Comments at 17 (“Long-term solutions, not short-term interim solutions, will provide critical location information as well as the level of reliability consumers have come to expect with existing 9-1-1 and E-9-1-1 voice service.”).

<sup>85</sup> Motorola Mobility Comments at 3.

**C. The Commission Should Implement a Statewide or Regional PSAP Trigger Mechanism.**

Regardless of the specific technologies used in NG911 solutions, PSAPs will require time and resources to prepare for the implementation of these new services. In recognition of these challenges, the *NPRM* sought comment on whether PSAP readiness should be factored into Commission action regarding NG911 implementation.<sup>86</sup> As the Commission acknowledged, there are thousands of PSAPs in the United States of varying sizes and capabilities.<sup>87</sup> Because E9-1-1 was deployed on a PSAP-by-PSAP basis, there were numerous areas where wireless providers expended time and resources deploying E9-1-1 even though the local PSAP was not capable of using these services.<sup>88</sup> The record demonstrates that PSAPs will face similar challenges in the deployment of NG911, and Public Safety and the wireless industry have shown that a state or regional approach to PSAP certification will best promote a smooth transition to NG911.

As Public Safety has noted, PSAPs will need to take several steps before they will be able to deliver NG911 capability. For example, PSAPs will, at a minimum, need to install and deploy a functioning ESInet with broadband capability.<sup>89</sup> And the King County E9-1-1 Program outlined numerous elements that a PSAP may need to install for it to be NG911-capable.<sup>90</sup> Not only will PSAPs need to acquire and install equipment, but existing staff will need to be trained

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<sup>86</sup> *NPRM* ¶ 90.

<sup>87</sup> *Id.* at ¶ 92.

<sup>88</sup> *Id.*

<sup>89</sup> APCO Comments at 15.

<sup>90</sup> Comments of the King County E911 Program, PS Docket Nos. 11-153 and 10-255, at 6 (Dec. 12, 2011) (“King County E911 Comments”).

in these new systems, and new personnel may need to be hired.<sup>91</sup> Given the numerous steps that need to be taken, CTIA echoes Qualcomm’s conclusion that “PSAPs should be required to demonstrate a certain level of technical NG911 capability at the regional level before wireless service providers are required to deliver such services to the relevant PSAPs, as currently is the case with E9-1-1 regulations.”<sup>92</sup>

CTIA supports a statewide or broad regional approach to PSAP certification because such an approach will promote efficiency and ensure that wireless carriers are not burdened with deployment responsibilities for services that consumers are unable to use. Numerous commenters support this approach, finding that statewide deployment “is necessary to ensure that NG911 is deployed efficiently for PSAPs, taxpayers, and service providers.”<sup>93</sup> Until PSAPs across a state or large region have demonstrated that they possess the capability to provide NG911 services, wireless providers should not be required to make the significant investments in making this service available. Such an approach has widespread record support.<sup>94</sup> Commenters

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<sup>91</sup> *Id.*

<sup>92</sup> Qualcomm Comments at 11.

<sup>93</sup> Verizon Wireless Comments at 13.

<sup>94</sup> *See, e.g.*, Sprint Nextel Comments at 23 (“Currently, there are approximately 7,000 PSAPs with varying technology solutions in place. It would be enormously difficult to implement a ‘one-size/fits-all’ approach. Realistically, a phased-in approach is likely to be necessary, and a phased-in approach at the state or regional level is likely to be more efficient. States or regions requesting NG9-1-1 capabilities should be required to demonstrate they are capable of receiving NG9-1-1 information, and the Commission should not ask carriers to take steps to migrate toward NG9-1-1 without an indication of readiness.”); USCC Comments at 11 (“State or regional-based triggers, as the Commission raises the possibility of in the NPRM, would be preferable to a more disjointed PSAP-by-PSAP approach.”); T-Mobile Comments at 9 (“One way to do this would be to ask states to determine when there was a sufficient critical mass of PSAPs ready to convert to NG911, and that all PSAPs within the region should then be required to convert to NG911 interfaces. Pursuing such a course would put the responsibility in the right place – the state – for ensuring that all PSAPs in an area are ready to move to NG911.”); Blooston Comments at 6 (“The Blooston Rural Carriers submit that the states should be required to demonstrate that barriers to NG911 deployment have been completely eliminated before a carrier is under any obligation to provide NG911 service. Similarly, the state should be

also have noted additional benefits to a statewide or regional triggering approach: it will ensure a more universal technological standard over a broader geographic area,<sup>95</sup> reduce costs, and facilitate agreements among stakeholders.<sup>96</sup>

The varying readiness of PSAPs also presents challenges to managing consumer expectations regarding the availability of NG911 in their area. As the King County E9-1-1 Program notes, “as soon as one area implements, other PSAPs will be expected to follow suit.”<sup>97</sup> If NG911 services are deployed on a PSAP-by-PSAP basis, the result could be substantial consumer confusion regarding the availability of services in their area. “Potential customers of the service may either expect the service to work everywhere and use it when it is unavailable, or be fearful that it is unavailable and be reluctant to use it even when it is available.”<sup>98</sup> By allowing NG911 deployment in a state or region once PSAPs are capable of offering these services, the Commission will reduce the risk of consumer confusion and misplaced expectations regarding the capabilities in their area, a result clearly in the public interest.

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required to demonstrate that its PSAPs have the equipment to process all of the NG911 data elements before carriers are under any obligation to provide NG911 service in a given geographic area.”).

<sup>95</sup> USCC Comments at 11.

<sup>96</sup> Verizon Wireless Comments at 13-14 (“The highly localized manner in which the Commission applies its ‘PSAP readiness’ criteria to wireless and VoIP E911, if applied to NG911, would unnecessarily drive up compliance costs for service providers and PSAPs alike and, thus, their customers and taxpayers, respectively. Requiring service providers to establish IP-based connectivity arrangements with thousands of individual PSAPs would impose unnecessary costs on service providers and increase the number of potential disputes between service providers and PSAPs – thus undermining stakeholders’ incentives to reach mutually-acceptable agreements on issues such as connection points.”).

<sup>97</sup> King County E911 Comments at 5.

<sup>98</sup> AT&T Comments at 14.

**D. Responsibility for Consumer Education Must Not Be Left Solely to the Wireless Industry.**

Comments in this proceeding have emphasized the importance of consumer expectations and education as NG911 services are rolled out. CTIA supports efforts to educate consumers regarding 9-1-1 and NG911 capabilities, and believes that this education is essential to manage consumer expectations regarding the services available to them in emergencies. However, consumer education requires that federal and state entities, as well as Public Safety agencies and consumer representatives, participate in the consumer education process, and that the responsibility not be left solely to the wireless industry.

Commenters have touted the importance of consumer education as NG911 services are deployed. As Qualcomm observed, “[s]uch public outreach is essential so the community of users, particularly the elderly and disabled, are informed of and, if necessary, taught how to access, new and unfamiliar NG911 services. These efforts also will empower the public to communicate effectively with emergency responders and further support their critical response efforts.”<sup>99</sup> Such consumer education is particularly important given the recent press coverage of the limited text-to-911 trials – as well as the instant proceeding. CTIA shares Sprint Nextel’s concern that “recent pronouncements made by the Commission and trials that have taken place may create a false impression with consumers that texting to 9-1-1 is currently possible.”<sup>100</sup> In the coming months and years, it is critical that consumers be properly informed of the capabilities in their area and not rely on systems that are not yet in place.<sup>101</sup>

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<sup>99</sup> Qualcomm Comments at 11.

<sup>100</sup> Sprint Nextel Comments at 8.

<sup>101</sup> *Id.* (“Sprint urges the Commission to take this opportunity to advise consumers that texting-to-9-1-1 is not currently possible and will not be possible in the short-term. Even an interim solution is likely to take months, if not years, to deploy nationwide, so consumers must be made aware of the current unavailability of texting to 9-1-1.”).

There is widespread support in the record for a consumer education mechanism that divides responsibilities evenly among all impacted groups. Commenters have cited numerous federal agencies and Public Safety organizations that can play a key role in consumer education, in addition to state and local governments and the wireless industry.<sup>102</sup> Consumer education at the local level is particularly important as NG911 services are gradually rolled out, as individual localities will be best positioned to advise consumers of the current state of emergency communications. For example, Sprint Nextel highlighted how local jurisdictions could use road signs to advise consumers of whether they support texting to 9-1-1.<sup>103</sup> In addition, the record also notes that targeted education efforts will be necessary for individuals with disabilities, senior citizens and children who may need more specific information about available NG911 capabilities.<sup>104</sup> Whatever consumer education methods are put into place, they should “take

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<sup>102</sup> See, e.g., Qualcomm Comments at 11 (“The federal government, the FCC, Department of Homeland Security, and other agencies, in conjunction with state and local governments, must engage in a broad and thoughtful public awareness campaign, as NG911 services are rolled out across America.”); USCC Comments at 13-14 (“The Commission should work with other government stakeholders such as the Department of Justice, Federal Emergency Management Administration’s Office of Disability Integration and Coordination, NENA, APCO, and others in the public safety community to promote public awareness of text-to-911 availability and limitations.”); Texas 9-1-1 Alliance Comments at 4 (“On the issue of public education for NG9-1-1, the Texas 9-1-1 Alliance agrees with prior comments by Motorola that ultimately the communications industry, device manufacturers, states, regions, localities, the Commission, and other federal agencies must all be responsible and actively involved in education efforts and making educational information widely available on web sites and other media.”); PSCO California Comments at 7 (“PSCO supports local, state, and federal level participation to actively educate and be responsible for formal NG9-1-1 public education efforts. Service providers must also be responsible for consumer education, terms and conditions, and limitations of their services.”).

<sup>103</sup> Sprint Nextel Comments at 24.

<sup>104</sup> See EAAC Report at 38 (EAAC recommends that the FCC include a substantial education and outreach program as part of any actions to implement NG9-1-1 rollout.”); Comments of Donna Platt, PS Docket Nos. 11-153 and 10-255, at 2-3 (Dec. 12, 2011) (“Education to community members who are deaf, deaf-blind, and hard of hearing is exceptionally important.”); and CTIA Comments at 17 – 19.

place on a regular and continuing basis during the transition from the PSTN to a fully IP voice and multimedia and multi-device environment for requesting emergency assistance.”<sup>105</sup>

Finally, CTIA stresses that the Commission should not mandate a particular means of consumer education, but rather should encourage stakeholders to implement a variety of efforts that they believe will be most effective. In particular, it should not mandate that wireless providers engage in specific disclosures regarding text-to-911 – service providers already have ample incentive to caution their subscribers regarding limitations on 9-1-1 services, and service providers will best know which means of disclosure are most effective for specific customers or groups of customers.<sup>106</sup> Instead, interested stakeholders, including the wireless industry, should work with the Commission to establish best practices to ensure that consumers receive information regarding NG911 in the form that will be most useful.

**E. The Commission Must Carefully Consider Concerns Relating to 9-1-1 Call Prioritization.**

CTIA shares the Commission’s concern that consumers need to be able to reach emergency services during major emergencies when call volumes are extremely high. However, CTIA cautions the Commission to proceed carefully in this area, as there are numerous unresolved questions the Commission must address regarding the issue of 9-1-1 call prioritization. These include technical, operational, legal, and regulatory questions.

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<sup>105</sup> Texas 9-1-1 Alliance Comments at 4.

<sup>106</sup> Verizon Wireless Comments at 17-18 (“The Commission should not mandate disclosure or consumer education requirements on service providers, however, given the myriad ways in which service providers market to and interact with their customers. Service providers have ample incentive to caution their subscribers about the limitations of 911 service in their territories, and Commission regulation requiring such disclosure is unnecessary. The various methods described in the NPRM, such as bill inserts, point-of-sale literature, and online information all have merit, but each may be more effective for some service providers than others. The Commission should instead encourage the development of industry best practices to ensure that consumers are informed, yet not overwhelmed or confused, about the NG911 services available via their networks and in their respective service areas.”).



As an initial matter, CTIA is concerned that a 9-1-1 call prioritization scheme ignores the fact that many calls to 9-1-1 are not true emergencies. Indeed, the Commission devoted an entire proceeding to addressing the problem of non-emergency 9-1-1 calls from non-service initialized handsets,<sup>107</sup> and the implementation of text-to-911 could aggravate this issue.<sup>108</sup> Aside from the non-service-initialized (“NSI”) issue, several commenters reported that in the wake of the East Coast Earthquake – the emergency primarily cited by the Commission as demonstrating the need for call prioritization – several calls were made to 9-1-1 that were not emergency calls.<sup>109</sup> Meanwhile, a 9-1-1 prioritization scheme would presume that every call to 9-1-1 is more urgent in nature than a call to any other phone number, a framework that ignores the importance of calls among families or medical and emergency personnel.<sup>110</sup> In fact, as Verizon Wireless observed, it

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<sup>107</sup> *Petition for a Notice of Inquiry Regarding 911 Call-Forwarding Requirements and Carriers’ Blocking Options for Non-Initialized Phones*, Notice of Inquiry, FCC 08-95 (Apr. 7, 2008).

<sup>108</sup> Motorola Mobility Comments at 4-5 (“There is already evidence that a substantial portion of the 911 voice calls placed from NSI devices are prank calls or are otherwise not related to an actual emergency. Indeed, in late 2006, 911 officials from four states conducted a survey of PSAPs in their areas that asked about their experiences with NSI devices. All of the four regions surveyed reported that over the time period covered less than four percent of the calls received from NSI devices were legitimate requests for help. Particularly in light of the increased anonymity and lack of location information associated with text-to-911, it is possible that allowing these communications from NSI devices could lead to even more bogus and prank messages, which waste PSAP resources and potentially endanger citizens that are truly in need of help.”).

<sup>109</sup> *See, e.g.*, Verizon Wireless Comments at 23 (“There is overwhelming anecdotal evidence that many 911 calls made in the aftermath of the August 2011 East Coast earthquake – a primary impetus for the Commission’s inquiry here – were non-emergency in nature.”); Sprint Nextel Comments at 16 (“It is Sprint’s understanding, based on discussions with PSAPs after the East Coast earthquake, that many calls received were calls seeking general information about what had just occurred, rather than reports of actual emergencies. This demonstrates the need for public education to inform users that calls to 9-1-1 should be reserved for true emergencies.”); T-Mobile Comments at 17 (“Press reports indicated that many calls to 911 were to ask questions such as ‘What just happened?’ or ‘Did we have an earthquake?’, or to report that the earthquake had occurred. While understandable, these are not proper uses of the 911 network, and consumed 911 answering capacity that might otherwise have been needed.”).

<sup>110</sup> AT&T Comments at 8 (“In addition to the bottleneck problem at the PSAP operations level, this form of prioritizing presumes that calls other than 911 calls during a disaster lack

is feasible that under a 9-1-1 prioritization regime, a non-emergency 9-1-1 call from a witness to an emergency could take priority over the victim's call.<sup>111</sup> Also, critical information systems that rely on cellular networks could be compromised during a large-scale emergency if their communications are throttled.<sup>112</sup> Finally, the Commission has not addressed how 9-1-1 call prioritization would impact the Wireless Priority Service ("WPS"), a service intended to give certain emergency personnel priority access to telecommunications networks during times of crisis, and there is a significant likelihood that WPS calls could be compromised under a 9-1-1 prioritization framework.<sup>113</sup>

There also remain unresolved other technical considerations related to 9-1-1 call prioritization. Depending on the location of congestion on a wireless network, prioritization of

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societal value. Not all emergency calls are made to PSAPs and not all calls to PSAPs are emergency calls. Some calls are directed to loved ones, care givers, or agencies that provide disaster assistance. Restricting the public's ability to make these types of calls during sudden unexpected disasters might lead to a greater degree of panic or confusion since people could not find out about the safety of loved ones or offer other assistance."); Verizon Wireless Comments at 22.

<sup>111</sup> Verizon Wireless Comments at 22 ("A single automobile accident can result in multiple 'good Samaritan' wireless 911 calls by passers-by who are not in immediate danger. In a 911 call prioritization regime, however, those calls might take priority over a non-911 call from the victim of the same accident to a spouse or physician, or even another 911 call from one of the accident victims.").

<sup>112</sup> AT&T Comments at 8-9 ("Similarly, some critical systems—such as alarm, automotive crash-detection, and healthcare systems—use the cellular network either as the primary or backup network. Restricting the ability of these systems to communicate critical data may also pose significant risks to life and property.").

<sup>113</sup> AT&T Comments at 9 ("Prioritization could potentially interfere or compete with Wireless Priority Service (WPS), which is intended to give certain emergency personnel—i.e., emergency first responders and other Government Emergency Telecommunications (GETS) users—access to telecommunications networks during times of crisis. Because WPS relies on queuing up WPS users for available voice slots up to a certain network capacity, prioritizing all 911 calls might jeopardize WPS calls by flooding the networks with other prioritized calls from the general public. At a minimum, considerable analysis should be undertaken before risking the WPS program.").

9-1-1 calls may not be effective.<sup>114</sup> As Verizon and Verizon Wireless observed, to receive priority a 9-1-1 call would first need to reach the underlying wireless network, something that may not happen in high volume calling situations because a handset may not be able to find an available handset channel.<sup>115</sup> The only way to truly prioritize 9-1-1 calls would be if networks could simultaneously detect each attempted 9-1-1 call and preempt any non-9-1-1 call in progress.<sup>116</sup> This would “require substantial development of handset and network technology” and “imposing such burdens on industry would not necessarily serve the public interest.”<sup>117</sup>

It is clear, then, that the issue of 9-1-1 call prioritization poses a number of technical and practical questions, and adopting a solution at this stage would be premature. Further, this issue will become more complicated as new calling innovations are deployed.<sup>118</sup> CTIA therefore supports Qualcomm’s suggestion that the Commission turn to standards groups to study these difficult issues, as these groups will provide industry stakeholders with the opportunity to carefully evaluate the concerns raised in this proceeding.<sup>119</sup>

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<sup>114</sup> Motorola Mobility Comments at 7 (“There are various points in the network where congestion could occur, and in some cases traffic prioritization may not be sufficient to prevent calls from being blocked. For example, if congestion is occurring at the radio access network—i.e., if the cell sites closest to the site of an emergency are being overwhelmed by the volume of callers—prioritization of traffic may not be effective.”).

<sup>115</sup> Verizon Wireless Comments at 20.

<sup>116</sup> *Id.* at 20-21.

<sup>117</sup> *Id.* at 21.

<sup>118</sup> Motorola Mobility Comments at 7-8 (“Additionally, as Voice over Internet Protocol service providers continue to innovate and implement emergency calling functionalities into their services, there may be added difficulties from the perspective of the access network operator in determining when data traffic is actually an emergency VoIP call.”).

<sup>119</sup> Qualcomm Comments at 10 (“The FCC should also look to ATIS, 3GPP, and CSRIC to study the difficult issue of prioritizing emergency calls and messaging, for collaborative thinking between public safety professionals and wireless service providers and equipment vendors on this issue is essential.”).

## V. CONCLUSION

CTIA and its member companies are committed to fulfilling the promise of NG911 services for all citizens, including individuals with disabilities who CTIA recognizes are most significantly poised to benefit from closing the gap between today's innovative mobile technologies and yesterday's 9-1-1 emergency communications system. The wireless industry has consistently collaborated and innovated to develop emergency communications solutions to the benefit of the public. CTIA urges the Commission to employ the expertise of the wireless industry, Public Safety, and other stakeholders, and promote a collaborative approach to NG911 deployment. The record in this proceeding demonstrates that there is widespread consensus regarding numerous NG911 issues, and further collaboration by interested stakeholders – rather than a mandated approach – will best serve the public interest.

Respectfully submitted,

By: */s/ Brian M. Josef*

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